meridian

15 October 2013

Submissions
Electricity Authority
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Transmission Pricing Methodology: CBA Working Paper

Meridian commends the Authority for responding to the feedback on the October 2012 CBA, and for taking the step of issuing this CBA Working Paper for comment. We have found this to be a useful step prior to the substantive CBA and we appreciate the opportunity to comment on the CBA Working Paper.

The CBA Working Paper is relatively high level. This reflects its role in the process, and the fact that a more detailed substantive CBA paper is to follow. For that reason our comments are relatively brief and high level also, and we look forward to engaging on the substantive CBA.

In responding to the issues raised in previous submissions and at the May 2013 conference, the CBA Working Paper usefully divided the issues into three categories: process, methodological and conceptual issues, and technical issues. We use the same framework below.

Process

Meridian agrees with the statement in the CBA Working Paper that:[1]

> *… the inefficiencies in transmission cost recovery under the status quo result in inefficient investment in, and operation of, the electricity industry.*

We also agree with the proposed problem definition:[2]

> *The current TPM can be improved so as to better promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers.*

However we submit that the position can be refined. A change to the TPM that creates significant long-term benefits for consumers has been identified. As we have explained in our previous submissions, several different studies have shown there are significant efficiency benefits from the single change of dropping the HVDC charge and including the cost of the HVDC assets in the current interconnection charge. In our 28 March 2013 Cross-Submission we highlighted that this position is widely supported.[3]

[1] Page 10.

[2] Page 10.

[3] See the table at pages 6-8 of our 28 March 2013 Cross-Submission.

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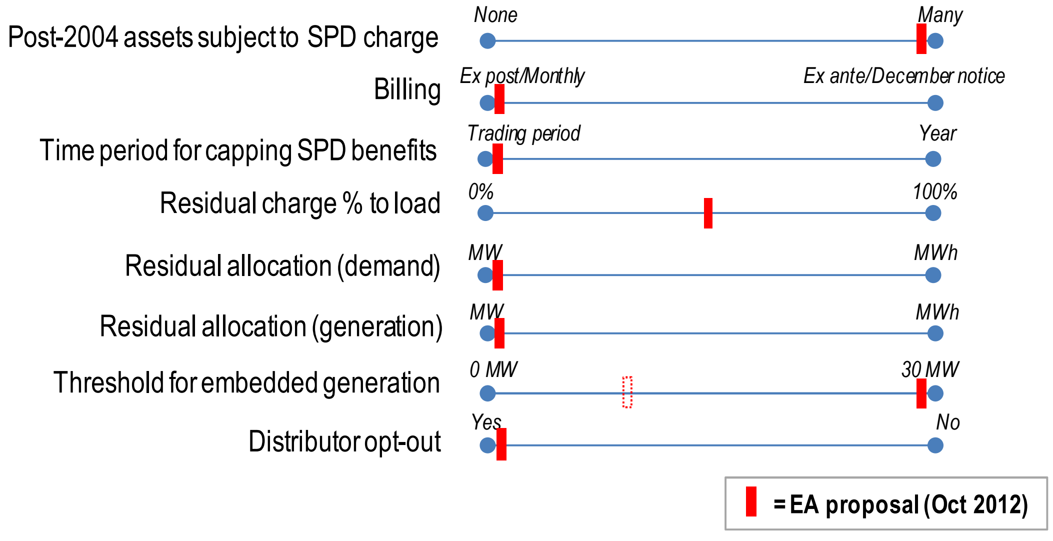
The refined task for this process, including the CBA, is to test whether options can be identified that are expected to generate *even greater* benefits.

To do that, the CBA Working Paper signals that a number of reform options will be considered. "Multiple options" will be the subject of working papers and included in the second, more detailed issues paper.[4] The CBA Working Paper refers to:[5]

> *A spectrum of options consistent with the Authority's Decision-making and Economic Framework paper, focusing on:*
>
> - *Recovering the costs of transmission services on a more efficient basis; and*
> - *More emphasis on recovering transmission costs from the competitive sector (i.e. generators and retailers).*

Meridian agrees with the decision to consider more than one option. As the CBA Working Paper notes, there is a spectrum of options to choose from. When doing so, Meridian submits that the Authority's filtering of the broad options remains sound, and the task is to identify a refinement of the current proposal that maximises net benefits. The Authority is on the right track in trying to bring a long-standing issue to a close, and it should resist suggestions to open up new fronts. The issues have been explored in depth, including in submissions on the Decision-Making and Economic Framework in 2012, submissions on the TPM Issues and Proposals Consultation Paper in 2013 and at the May 2013 conference. We encourage the Authority to consider permutations to its proposal that respond to points made by participants and narrow the areas of disagreement.

From what is signalled in the CBA Working Paper, any comments on the options to be considered should be made in this submission (as the Authority will make its choices prior to issuing the next paper). Reflecting on the discussion at the May 2013 conference, and the impact on efficiency, Meridian submits the following dimensions are key components of transmission options from an efficiency perspective:



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[4] Page 5.

[5] Page 10.

For reference, we have included the Authority's proposal on the diagram. As the Authority is aware, we set out a number of modifications in our 1 March 2013 Submission and 28 March 2013 Cross-Submission that responded to concerns raised by market participants. The current transmission pricing regime is not shown as it is inconsistent with the Authority's decision making framework. We suggest that design of the residual charge be considered as a component of any option as it is a significant cost, particularly in the near term, and the design of the charge is important.

It would be useful to clarify one aspect of the discussion of options in the CBA Working Paper. As noted above, the CBA Working Paper states that the options to be considered will focus on "more emphasis on recovering transmission costs from the competitive sector (i.e. generators and retailers)". It is not clear whether the omission of a reference to direct connect customers is intended to signal that they will bear a lesser share of transmission costs than other beneficiaries. If so it will be important to explain the rationale for this position.

Methodological and conceptual issues

Meridian agrees that the use of bottom-up models will complement top-down approaches. A central challenge here is that while it is useful to do a bottom up analysis, this requires an articulation of all of the ways that a change in the TPM changes the behaviour of market participants, and how that in turn operates on long term efficiency outcomes.

In particular, care will be needed when analysing the ways in which improved beneficiary-pays price signals alter the behaviour of market participants. In the short term, reduced use of existing transmission assets can result in static inefficiencies. However, if a beneficiary-pays pricing approach is implemented in a credible and sustainable way[6], in the medium and long term market participants will adjust their behaviour in ways that generate significant efficiency benefits.

An important example of medium and longer term benefits of a beneficiary pays approach is the increased incentives on market participants to get involved in transmission investment planning, and scrutinise transmission investment timing. In our view section 6 of the CBA Working Paper under-emphasises the benefit of providing a credible beneficiary-pays price signal. The focus on "avoided costs" also seems too narrow, given the substantial benefits that could come from deferring transmission investment to more optimal timing.

We also note that these incentives and benefits are a good candidate for a quantifiable case study. For example, the benefit of identifying the efficient timing of a certain transmission project could be quantified.

Technical issues

The Working Paper proposes that a 20 year appraisal period be used for the CBA, alongside values of 10 year and 30 year periods. This is in contrast to the 30 year period adopted by the Authority for its previous CBA, with sensitivity analysis around 20 and 40 year periods. The Working Paper does not provide any rationale for the shift. Given the objective is to analyse an institutional change – independent of the life of a particular asset - Meridian considers that a longer rather than shorter time frame is appropriate.

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[6] See National Electricity Amendment (Inter-regional transmission charging) Rule 2013 (AEMC, 28 February 2013), page 19.

Institutional changes should be analysed on the basis that they will prevail for the life of the market, unless regulatory risk is to be factored in. It is relevant that institutional change under the Authority's mandate must meet the test of dynamic efficiency so that if, for example, HVDC charges were to be changed in the future they would augment dynamic efficiency. A finite time period for the CBA implies a return to the status quo at the end of that period; which is not at all what would be expected of institutional change.

Just as the Authority's CBA is using the current TPM as the status quo rather than the 1988 TPM, any subsequent CBA on transmission pricing would use the proposed TPM as the status quo. Therefore, the term of any proposed change should be longer, rather than shorter, to reflect that it will become the "new normal". This implies an appraisal period more like 50 years, but at the very least 30 years as the base case.

The Working Paper proposes the use of a discount rate of 8%, based on the default (pre-tax real) discount rate recommended by the Treasury. The working paper also proposes to sensitivity test this by varying it by ±2%. Meridian disagrees with this range.

The rates proposed by the Authority conflict with (and are higher than) two others:

- The default discount rate of 7% (pre-tax real) used by the Commerce Commission under Transpower's capital expenditure input methodology.[7] It is important to note that this rate is used to assess net benefits of investments in the electricity market; and

- Transpower's WACC, which the Authority stated as being 6% (vanilla real) in the 2013 year. In fact, the 6% is a vanilla *nominal* WACC,[8] and the Commission's pre-tax real WACC estimate was 4.8%.[9]

Meridian does agree with the Authority that it is appropriate to use a social discount rate in assessing TPM reform, rather than Transpower's WACC. This CBA is assessing institutional change, not an investment proposal, and the social discount rate is appropriate.

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[7] Commerce Commission (2012), "Transpower Capital Expenditure Input Methodology, Reasons Paper, 31 January, paragraphs 7.4.27-7.4.31.

[8] The Commerce Commission's Transpower Input Methodologies Determination ([2012] NZCC 17) notes that the risk-free rate is based on nominal bonds (see clause 2.4.3), implying a nominal cost of capital. This is also supported by the Commission's conversion of estimates of the real WACC from the UK to nominal terms to enable a comparison with the WACC it calculates for New Zealand electricity and gas distribution businesses and Transpower (Commerce Commission (2010), "Input Methodologies (Electricity Distribution and Gas Pipeline Services", Reasons Paper, December, paragraph H13.31).

[9] Commerce Commission (2012), "Cost of capital determination for information disclosure year 2013 for Transpower, gas pipeline businesses and specified airport services (with a June year-end)", [2012] NZCC 20, 30 July. The mid-point vanilla nominal WACC calculated by the Commission for Transpower is 6.01%. Using the Commission's inputs, this equates to a pre-tax nominal WACC of 7.38%. This can be converted to a real WACC by using the conversion (1+nominal)/(1+inflation rate) – 1. At an assumed inflation rate of 2.5%, the pre-tax real WACC is 4.76%.

Standing back, it is important to recall the task is to identify the social discount rate and the task of sensitivity analysis is to examine the relative importance of the assumption. While this rate is not known with precision, the range of 6% to 8% would be appropriate. It would be extra-ordinary for the social discount rate to lie above that range.

In section 13 the CBA Working Paper suggests there might be a "hurdle level of benefits" that must be exceeded before a change is made to the TPM.[10]

This feels like very slippery ground. The only argument for choosing a hurdle is where there is value in delaying, such as when contemplating a large sunk investment in a situation of uncertainty. However, as noted above TPM reform is about changing the institutional arrangements, and the changes will be robust to market outcomes. The TPM-reform CBA cannot be approached as another investment business case where hurdle rates incorporate the option to delay, pending some resolution of uncertainties such as relate to such market factors as demand, cost and technology. There is certainly no reason for the Authority to be imposing an arbitrary hurdle on the benefits of regulatory change.

Further, New Zealanders should not lose the benefit of a regulatory change simply because it is modest, and we should not be constantly looking for "big bang" regulatory change. A culture of regular incremental improvement in the Code will serve New Zealand well.

In the current process there is a clear answer to this abstract issue. As discussed above, the starting point should be that $30m of efficiency gains are available simply from folding the recovery of the costs of the HVDC link into the current interconnection charge. These efficiency gains have been thoroughly assessed, do not benefit from delay, are uncontroversial, and are easily captured. They are material.[11] The question for this process, including the CBA, is incremental. Can additional changes to the TPM be identified that further improve long term welfare?

If you have any questions please contact me.

Yours sincerely

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[10] Paragraph 13.3.

[11] See Meridian Cross-submission on Decision-Making and Economic Framework for Transmission Pricing Methodology Review Consultation Paper (9 March 2012), paragraph 54 and Appendix 1.